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10/554,624

10/27/2005

Ryouichi Koga

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EXAMINER

YOUNKINS, KAREN L

ART UNIT

PAPER NUMBER

3751

NOTIFICATION DATE

DELIVERY MODE

11/20/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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pto@gbpatent.com

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/554,624 | Applicant(s) KOGA ET AL. | |
| | Examiner KAREN YOUNKINS | Art Unit 3751 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 23-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>5/8/2009, 8/11/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Responsive to the amendment dated 7/20/2009, claim 47 has been added.
Claims 1-47 are currently pending, with claims 23-46 currently withdrawn from consideration.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it is not in proper idiomatic English. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 47 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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6. The claim language "wherein the second flow path surrounds the first flow path in a circumferential direction of the nozzle device" renders claim 47 indefinite. It is the examiner's understanding of the instant application that the second flow path does not travel in a distance around the nozzle device. Therefore, it is unclear how the second flow path could surround the first flow path in a circumferential direction of the nozzle device.

7. In light of the above, the claim is examined as best understood.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-22 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Publication No. 2003/0140407 to Matsumoto in view of US Patent No. 6,754,912 to Hayashi.

10. Regarding Claims 1-12 and 15, Matsumoto discloses a nozzle device comprising a spray hole for spraying washing water (near 25), a pipe the forms a first flow path 27a that introduces the washing water to the spray hole, and a cover member 20 having the spray hole, provided so as to surround said pipe 27a, and with a front end that is close. There is a space between the pipe and the cover member forming a second flow path 27b that introduces the washing water to the spray hole. There is a spray member 29 having an orifice and merging the washing water supplied from said first flow path and

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the washing water supplied from said second flow path to introduce the merged washing water into said orifice. The spray member forms a spray space having an opening at its one end and having the orifice (in 25) at the other end. The first flow path introduces the washing water to the spray space from the opening, the second flow path introduces the washing water to the spray space from its peripheral surface. The spray space has a cross-sectional area that gradually or continuously decreases from said opening to said orifice. The spray space includes a first space having a first inner diameter from the opening to the orifice. A second space has a second inner diameter smaller than said first inner diameter, and a third space having a third inner diameter smaller than said second inner diameter. The washing water introduced from the second flow path is supplied to the second space. The second space is a cylindrical space, and the washing water introduced from said second flow path is supplied along an inner peripheral surface of said cylindrical space. The nozzle device according to claim 5, wherein the axis of said second flow path is directed inward from a peripheral wall of said cylindrical space such that the washing water is discharged toward the outermost periphery of a swirl having no vorticity within said cylindrical space from said second flow path. The first space has an inner diameter that continuously decreases from said opening to said second space. The third space has an inner diameter that continuously decreases from said second space to said orifice. The inner diameter of said cylindrical space is two times to five times the inner diameter of said orifice. The nozzle device according to claim 3, wherein the cross-sectional area of said first flow path is larger than the cross-sectional area of said opening of said spray space. The

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spray hole is formed on a peripheral wall in the vicinity of a front end of said cover member, and the spray member is inserted into the front end of said cover member.

The front end of the cover member has a substantially hemispherical shape. A part of the peripheral wall in the vicinity of the front end of the cover member is formed so as to have a flat surface. The spray hole is formed on the flat surface.

11. Claim 14 amounts to a product-by-process limitation. Such a limitation does not operate to distinguish a claimed structure from a prior art structure that otherwise discloses the claimed structure.

12. Regarding Claims 13 and 16-22, Matsumoto fails to disclose the spray hole being larger than the orifice, a positioner, and an annular sealing member. However, Hayashi teaches a spray hole (bottom of 31) with a larger inner diameter than the orifice 163A. Hayashi also teaches that the spray member has a positioner 162 abutting against an inner surface at the front end of the cover member such that the orifice is positioned relative to the spray hole. The positioner comprises a first flat portion formed in the cover member, and a second flat portion formed in the spray member. The pipe being inserted into the cover member so that the second flat portion in the spray member is opposite to the first flat portion in the cover member. The positioner comprises a front end abutment portion provided at a front end of the spray member and abutting against the inner surface at the front end of the cover member. The positioner comprises a peripheral surface abutment portion provided in said spray member and abutting against an inner peripheral surface of said cover member. The positioner comprises an engagement portion provided at a rear end of the cover member, and a portion to be

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engaged, provided at a rear end of said pipe, with which the engagement portion is engaged. There is an annular sealing member (top and bottom of 162) for watertightly sealing the area between the spray member around the orifice and the cover member around the spray hole. Also, the nozzle is taught to be metal. It would have been obvious to one of ordinary skill in the art to have included the spray hole that is bigger than the orifice of Hayashi into the nozzle of Matsumoto because the orifice needs to be small to increase the velocity of washing water spraying out, but a small orifice would only allow the swirling washing water to cover a small area. However, with a larger spray hole, the swirling water can spread out and cover a larger area. It would have been obvious to one of ordinary skill in the art to include a positioner of Hayashi for the spray hole of Matsumoto, because the positioner acts as a pathway from the orifice to the spray hole. Without a positioner the water would not go directly into the spray hole, and could go where it is not intended. It would have been obvious to one of ordinary skill in the art at the time of the invention to have a seal member for the orifice and the spray hole. It is obvious the seals between the orifice and the spray hole in relation to the positioner 162 are watertight because the water would not be able to swirl inside if it were not watertight. The watertight seal would have been obvious to include because without it the water would escape the spray member before the spray hole. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the nozzle of metal, because Hayashi discusses using metal for parts of the nozzle, and metal is easy to clean, which allows for something like a bidet, that needs to be cleaned,

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to be cleaned easily and quickly. It would be obvious to make the metal out of a stainless metal, as most metals are stainless.

13. Regarding claim 47, the second flow path 'surrounds' the first flow path for a distance around the first flow path along a direction of the nozzle device.

Response to Arguments

14. Applicant's arguments filed 7/20/2009 have been fully considered but they are not persuasive.

15. On pages 19 and 20 the applicant has asserted that Matsumoto cannot disclose both the presently claimed cover member and pipe that forms a flow path. The examiner respectfully submits that Matsumoto discloses both the presently claimed cover member and pipe that forms a flow path. The cover member 20 has the spray hole as claimed and is integrally formed of a cylindrical metal whose front end is closed. The cover member is capable of performing the functional recitation of "to surround said pipe," as the cover member surrounds the pipe in figure 12. The pipe forms a first flow path within the recess of 27a, and the first flow path introduces the washing water to the spray hole as claimed.

16. On page 20 the applicant has asserted that Matsumoto does not further disclose the space forming a second flow path as recited in claim 1. It is respectfully submitted that the space forming a second flow path 27b is provided by Matsumoto as claimed. See the rejection of claim 1 set forth above for further discussion.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAREN YOUNKINS whose telephone number is (571)270-7417. The examiner can normally be reached on Monday through Friday 7:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571)272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. Y./

Examiner, Art Unit 3751

/Gregory L. Huson/

Supervisory Patent Examiner, Art Unit 3751